Basic Project Information	
What is the Project Name?	East Loop Project
Who is the Project Sponsor?	Cameron County Regional Mobility Authority and Texas Department of Transportation
Was an application for USDOT discretionary grant funding for this project submitted previously?	Yes, FASTLANE (2016)
A project will be evaluated for eligibility for consideration for all three programs, unless the applicant wishes to opt-out of being evaluated for one or more of the grant programs.	__ Opt-out of Mega? __ Opt-out of INFRA? __ Opt-out of Rural?
Project Costs	
MPDG Request Amount	Exact Amount in year-of-expenditure dollars: $72,837,000
Estimated Other Federal Funding (excl. MPDG)	Estimate in year-of-expenditure dollars: $24,279,000
Estimated Other Federal funding (excl. MPDG) further detail	Other Federal funding from Federal Formula dollars: $24,279,000 Other Federal funding being requested from other USDOT grant opportunities?: $_____0____ From What Program(s)?:__
Estimated non-Federal funding	Estimate in year-of-expenditure dollars: $24,279,000
Future Eligible Project Cost (*Sum of previous three rows)*	Estimate in year-of-expenditure dollars: $121,395,000
Previously incurred project costs (*if applicable)*	Estimate in year-of-expenditure dollars: $9,100,000
Total Project Cost (Sum of 'previous incurred' and 'future eligible')	Estimate in year-of-expenditure dollars: $130,495,000
INFRA: Amount of Future Eligible Costs by Project Type	1) A highway freight project on the National Highway Freight Network: $121,395,000 2) A highway or bridge project on the National Highway System: $_____ 3) A freight intermodal, freight rail, or freight project within the boundaries of a public or private freight rail, water (including ports), or intermodal facility and that is a surface transportation infrastructure project necessary to facilitate direct intermodal interchange, transfer, or access into or out of the facility: $_____ 4) A highway-railway grade crossing or grade separation project: $_____ 5) A wildlife crossing project: $_____ 6) A surface transportation project within the boundaries or functionally connected to an international border crossing that improves a facility owned by fed/state/local government and increases throughput efficiency: $_____ 7) A project for a marine highway corridor that is functionally connected to the NHFN and is likely to reduce road mobile source emissions: $_____ 8) A highway, bridge, or freight project on the National Multimodal Freight Network: $_____
Mega: Amount of Future Eligible Costs by Project Type	1) A highway or bridge project on the National Multimodal Freight Network: $_____ 2) A highway or bridge project on the National Highway Freight Network: $121,395,000 3) A highway or bridge project on the National Highway System: $_____ 4) A freight intermodal (including public ports) or freight rail

	project that provides public benefit: $_____ 5) A railway highway grade separation or elimination project: $_____ 6) An intercity passenger rail project: $_____ 7) A public transportation project that is eligible under assistance under Chapter 53 of title 49 and is a part of any of the project types described above: $_____ 8) A grouping, combination, or program of interrelated, connected, or dependent projects of any of the projects described above
Rural: Amount of Future Eligible Costs by Project Type	1) A highway, bridge, or tunnel project eligible under National Highway Performance Program: $_____ 2) A highway, bridge, or tunnel project eligible under Surface Transportation Block Grant: $_____ 3) A highway, bridge, or tunnel project eligible under Tribal Transportation Program: $_____ 4) A highway freight project eligible under National Highway Freight Program: $_____ 5) A highway safety improvement project, including a project to improve a high risk rural road as defined by the Highway Safety Improvement Program: $_____ 6) A project on a publicly-owned highway or bridge that provides or increases access to an agricultural, commercial, energy, or intermodal facility that supports the economy of a rural area: $121,395,000 7) A project to develop, establish, or maintain an integrated mobility management system, a transportation demand management system, or on-demand mobility services: $_____
Project Location	
State(s) in which project is located	Texas
INFRA: Small or Large project	Large
Urbanized Area in which project is located, if applicable	Brownsville Urbanized Area (UA 10945)
Population of Urbanized Area (*according to 2010 Census*)	217,585
Is the project located (entirely or partially) in Area of Persistent Poverty or Historically Disadvantaged Community?	Yes Census Tract 133.07, Cameron County, Texas, Persistent Poverty & Historically Disadvantaged Census Tract 133.08, Cameron County, Texas, Persistent Poverty & Historically Disadvantaged
Is the project located (entirely or partially) in Federal or USDOT designated areas	Yes. Opportunity Zones: Census Tracts 127 & 133.07 in Cameron County, Texas
Is the project currently programmed in the: • TIP • STIP • MPO Long Range Transportation Plan • State Long Range Transportation Plan • State Freight Plan	Yes, the project is currently programmed on the following: RGVMPO TIP RGVMPO MTP TxDOT STIP TxDOT UTP TxDOT BTMP

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I Project Description

The Cameron County Regional Mobility Authority's (CCRMA) main goal is to increase the quality of life for the inhabitants and visitors of South Texas. The CCRMA is tasked with planning and implementing a complete system of transportation infrastructure additions and upgrades for Cameron County and neighboring regions that will support economic development, enhance safety and provide a seamless and efficient transportation and freight corridor for the benefit of South Texas and the entire nation. To accomplish this goal, the CCRMA has partnered with the Texas Department of Transportation (TxDOT) to further the development and implementation of the East Loop Project. The East Loop Project has been identified as an essential project by and is included in both the Rio Grande Valley Metropolitan Planning Organization's (RGVMPO) 2010-2035 Plan and the CCRMA System Plan. The Cameron County East Loop Project integrates comprehensive regional planning, multi-modal options (rail, roadway, ship, air, etc.), and modern technology to develop this world-class project in this major freight corridor within Cameron County. With funding from the Multimodal Project Discretionary Grant Program which includes the MEGA, INFRA and RURAL Grant Programs, the East Loop will not only benefit South Texas, but the state of Texas and the United States as well.

The East Loop Project consists of the construction of a 4-lane overweight corridor from the Port of Brownsville to IH-69E / U.S. 77 at the Veterans International Bridge. The design includes a 6-lane section at the intersection with I-69E which transitions to a 4-lane non-controlled access curb and gutter facility access roadway from I-69E / U.S. 77 to Azucena Avenue. It continues as a 4-lane divided roadway with a 16-foot raised median and open ditches to FM 3068 and then turns north along FM 1419 and connects to SH 4. The project will continue north to connect to the south side of the Port of Brownsville with a two-lane entrance. The proposed project will provide greater international access and movement of goods to Mexico through the Veterans International Bridge, which provides access to the West to Monterrey via MEX-2.

The proposed East Loop will implement the use of the Continuous Green T-Intersection design, which provides benefits to the traffic traveling to the Port of Brownsville from the Veterans International Bridge. Eastbound traffic will have the ability to flow freely through four intersections, with this alternate design reducing the number of stops for vehicles and particularly trucks. Benefits include reduced vehicle operation and fuel costs, reduced right-of-way requirements, reduced congestion and stops, and most importantly project financial feasibility. Overall, the Continuous Green T-Intersection will maintain safety performance based upon present and future Average Daily Traffic (ADT) and will provide a thru-lane for truck traffic eliminating four stops. The Project will also reduce the impact to the environment and future emissions as well as reduce impact to the traveling public.

With the East Loop connecting to I-69E / U.S. 77 / 83 and the Veterans International Bridge, the project will be connected to the National Highway Freight Network, and by connecting the Port of Brownsville with a direct route to the Veterans International Bridge, the Cameron County East Loop Project will become an important route used in the transportation of international goods between the international bridge and the deep-water port. The capacity of commercial freight that will utilize the corridor will also increase due to the new founded ability to transport overweight cargo. Currently, commercial trucks transporting overweight cargo to and from Mexico are required to obtain a permit which grants them access to travel along the currently existing, and overly congested, overweight corridor to and from the

Port of Brownsville and the Veterans International Bridge. The proposed roadway to be constructed by the project will consist of a continuously reinforced concrete pavement section which shall withstand the impact of overweight commercial vehicles, and by removing these vehicles from the existing route along SH 4 / SH 48, an increased level of safety is expected along with a decrease in maintenance along the existing route. The East Loop project will include a highway grade crossing at SH 4. The proposed four-lane bridge will provide a direct connection from East Loop / Texas FM 1419 / S Oklahoma Avenue to SH 4.

Most of the congestion problems in Brownsville, associated with international commercial traffic operations, were significantly alleviated with the opening of the Veterans International Bridge in 1999. Relocation of commercial truck traffic to the Veterans International Bridge significantly aided traffic flow in the vicinity of the Gateway International Bridge and the B&M Bridge, as well as in downtown Brownsville. A very large percentage of the Brownsville international commercial traffic is centered on and shipped to and from the Port of Brownsville. The diversion of border commercial truck traffic to the Veterans International Bridge now allows the movement of goods to and from the Port to take place entirely within Brownsville's southeast quadrant. This route between the Port of Brownsville and the Veterans International Bridge, SH 4 and SH 48, constitutes Brownsville's overweight truck corridor. Overweight trucks are confined to this corridor and pay a fee collected at the Port to help fund repairs to remedy damages caused by these loads.

It is estimated that approximately 250,000 overweight trucks carrying up to 120,000 lbs. will utilize the East Loop corridor in the year 2024. The proposed East Loop will facilitate the movement of trade to and from the Port of Brownsville, which exports and imports over 11.3 tons of steel, petroleum, machinery, ores and other international trade exports to Mexico. The international movement of these goods between the U.S. and Mexico will be facilitated through the improvement of facilities at the Port and Veterans International Bridge. Improved access to the Port will help in reducing the cost of moving goods, commodities, services, and people. Development of trade support-related facilities will increase economic growth in the area immediately adjacent to the Port of Brownsville and the Foreign Trade Zone. The proposed East Loop project will then serve as the new and improved overweight truck corridor, this corridor was approved by the Texas State Legislature in 2009.

The proposed East Loop will reduce congestion on SH 48 for local and regional passengers including first response services such as EMS, Police, and Fire Departments. Local and regional police as well as fire and EMS services will have safer and faster access in the SH 48 Corridor and in the South and East Sector of Brownsville. The proposed roadway will move hazardous and overweight traffic, which will have the effect of alleviating commercial traffic near seven schools in the area. Additionally, with the decrease in traffic occupying the SH 48 corridor from the Port of Brownsville to the Veterans International Bridge, maintenance expenditures will decrease as well. Texas ports are served by roadway infrastructure that needs additional improvements to meet the demand and eliminate safety hazards. Separation of passenger vehicles and commercial traffic is required to facilitate a more direct route from the Port of Brownsville to the Veterans International Bridge.

Redirecting traffic through the East Loop corridor will not only eliminate seventeen (17) traffic stops and reduce school zone crossings, improving safety for our children, but it will also significantly improve air quality along the SH 48 corridor. Carbon Monoxide levels produced by the current freight traffic in the area poses an immediate threat to the children attending the elementary, middle, and high schools along

SH 48. Congestion on I-69E and SH 48 will decrease, and time of travel will be reduced. The current route has more vehicle/truck accidents than any other similar route in Texas. The project will reduce freight travel time to 15 minutes, which can currently take up to 45 minutes between the Port of Brownsville and the Veterans International Bridge. The proposed East Loop will serve the Port of Brownsville which moved 11.3 million tons of material in 2018, up from 7.6 million tons in 2014. The importance of the Port of Brownsville to Cameron County, Texas and to the United States cannot be understated, which is why projects that support the port while improving the safety of our residents is of critical importance to the region.

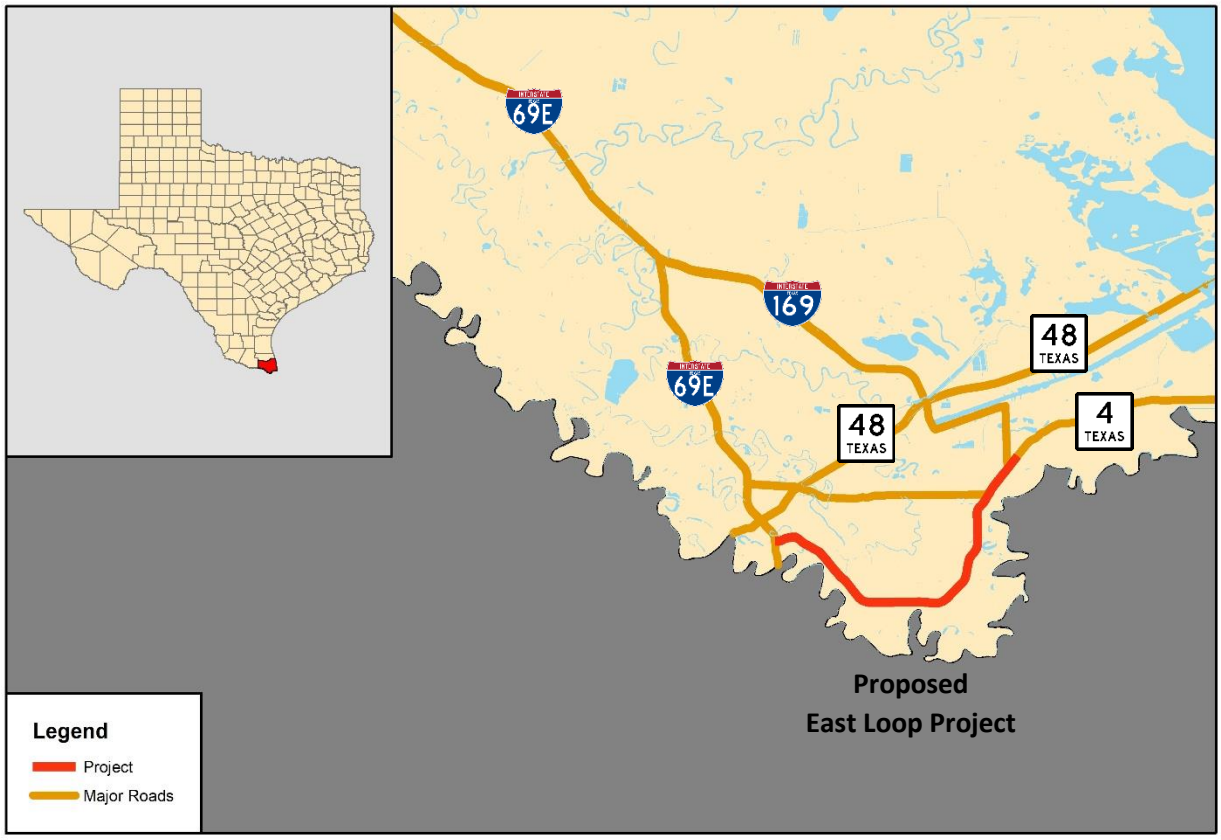

Figure 1: Project Location Map

II Project Location

Project Area Description

The East Loop Project is located in the southeastern quadrant of Cameron County, Texas in and around the urban area of the City of Brownsville as shown on Figure 1 Project Location Map on the previous page. The City of Brownsville is located in Texas' 34th Congressional District, along the Border between the State of Texas and the State of Tamaulipas in Mexico. The project starts at the intersection of I-69E and East University Blvd. just North of the Veterans International Bridge at Los Tomates, heading in a general easterly direction avoiding the bulk of the Brownsville Urbanized Area and connecting to Texas State Highway 4 south of the Port of Brownsville.

As previously stated, the project shall construct an overweight corridor between the Port of Brownsville and I-69E, just North of the Veterans International Bridge. Commercial vehicles currently travel along SH 48 and SH 4 between the Port and I-69E, however the construction of this corridor will improve travel time reliability and improve safety along SH 4 / SH 48 which are entirely within the Urbanized Area of Brownsville, TX. The project would provide those outside the urbanized area an improved route into the city, as well as creating a safe and faster route to Veterans International Bridge at Los Tomates and to the National Highway System via I-69E.

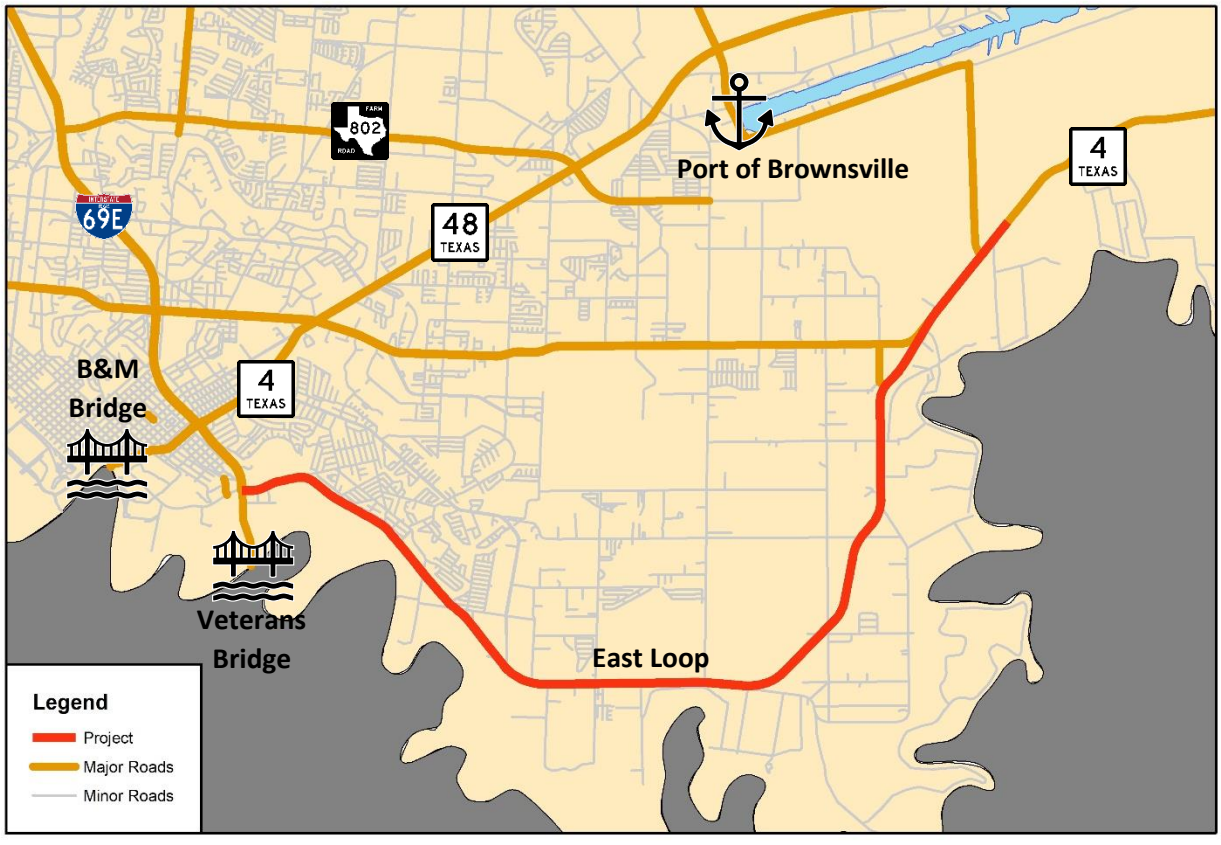

Figure 2: Surrounding Transportation Infrastructure

Applicable Qualifying Zones

The proposed project area is not located in or near an Empowerment Zone, a Promise Zone or a Choice Neighborhood as designated by the U.S. Department of Housing and Urban Development. The project alignment does traverse through census tracts that are identified as either an Area of Persistent Poverty, a Historically Disadvantaged Community, or an Opportunity Zone.

Cameron County Census Tracts 133.07 and 133.08 both qualify as an Area of Persistent Poverty and Historically Disadvantaged Community as defined by the NOFO and as shown on Figure 3 below.

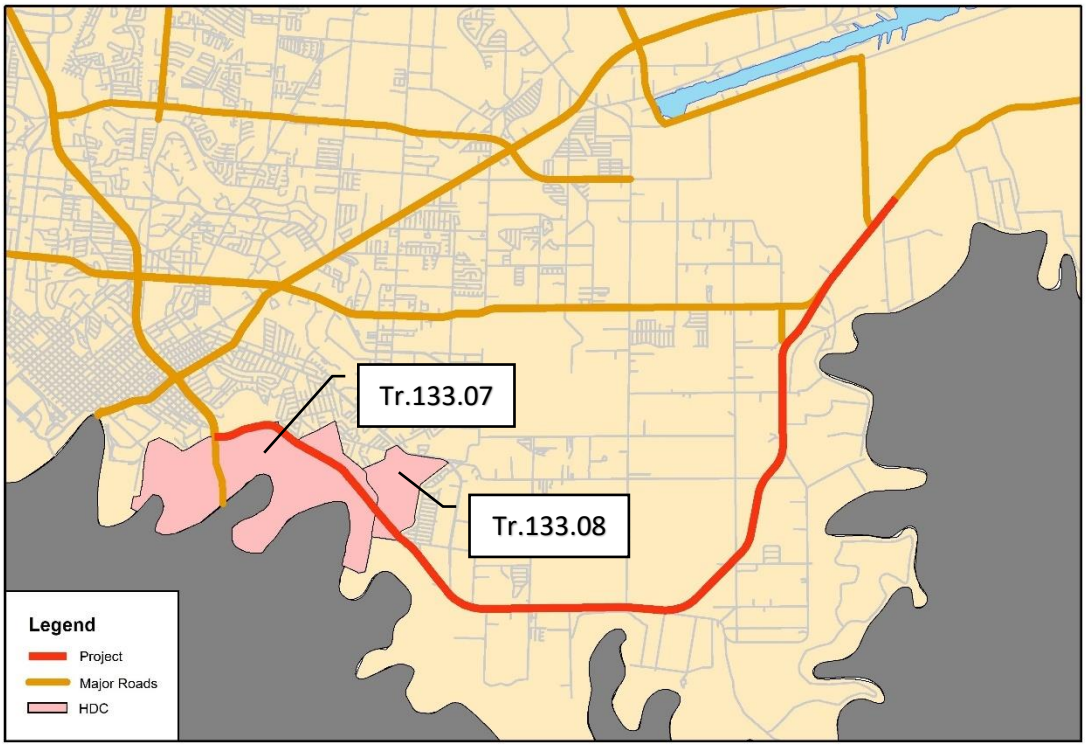

Figure 3: Areas of Persistent Poverty and Historically Disadvantaged Communities

Brownsville is categorized by the 2010 census as an Urbanized Area (UA 10945), as shown in Figure 4 on the following page. The project is within both Urban and Rural Areas, of the proposed 10.1-mile-long project area, the project goes through six legs alternating between Urban and Rural Areas. The three rural sections account for approximately 8.1 or 81% of the total project length.

As per the Texas Economic Development & Tourism Office, Census Blocks 133.07 and 127 are designated as Opportunity Zones as defined by the Tax Cuts and Jobs Act of 2017. As shown in Figure 5 on the following page, approximately 3.1 out of 10.1 miles, or 31% is located within a designated Opportunity Zone.

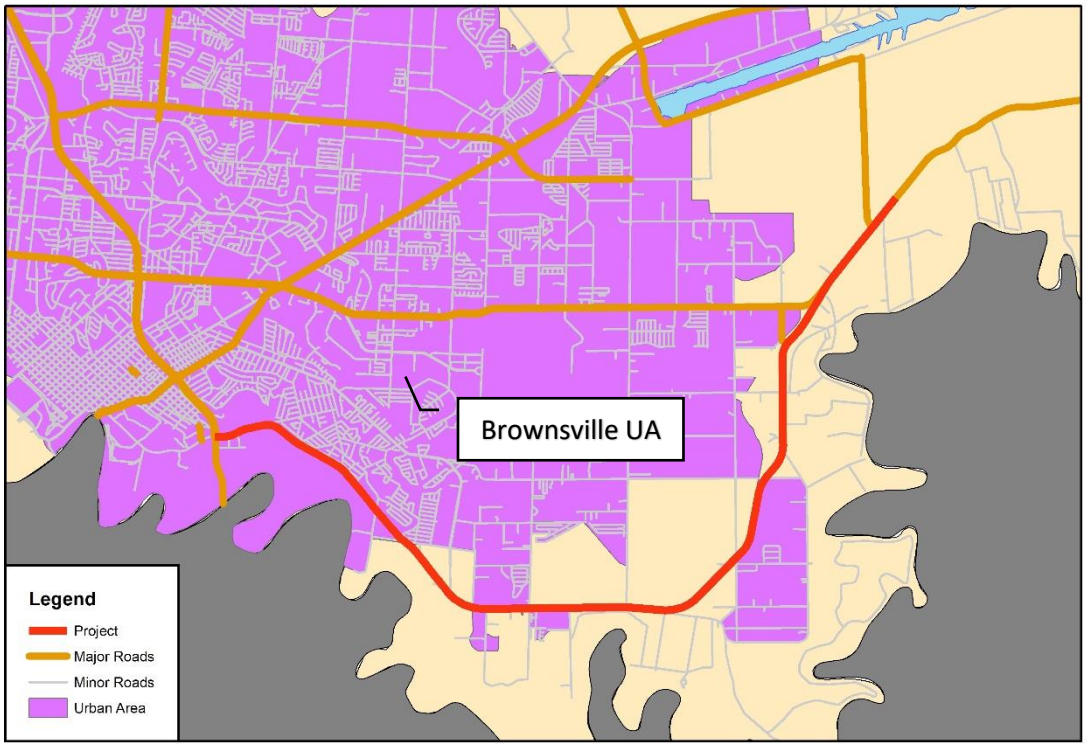

Figure 4: Brownsville, Cameron County Urbanized Area (2010 Census)

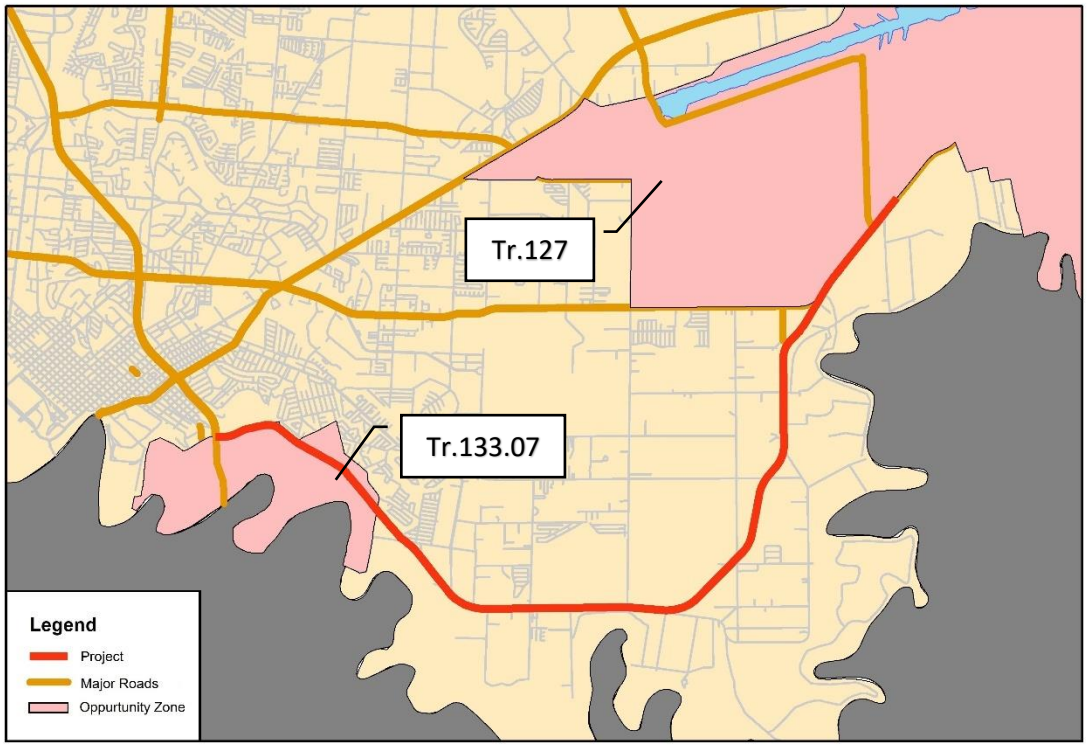

Figure 5: Census Tracts Designated as Opportunity Zones

III Project Parties

On June 22, 2004, the Cameron County Commissioners' Court authorized the County Judge to file a petition with the Texas Transportation Commission to create a Regional Mobility Authority (RMA) for the Cameron County area. The petition was approved by the Texas Transportation Commission on September 30, 2004. The Commissioners' Court formally approved the conditions set forth by the Texas Transportation Commission for the RMA and subsequently appointed the Directors of the RMA, with the CCRMA holding its first meeting in 2005. Frank Parker, Jr. has been serving as Chairman of the Board for the CCRMA since 2016.

The purpose of the CCRMA is to provide the region with an opportunity to significantly accelerate the needed transportation projects and to have a local entity in place that will make mobility decisions that benefit the community, while also enhancing the economic vitality and quality of life for the residents in the Lower Rio Grande Valley of Texas. It is extremely important that transportation infrastructure improvements continue to keep up with the population growth that Cameron County is experiencing.

The CCRMA assists the citizens of South Texas by providing congestion relief, traffic safety, enhanced mobility, and visible alternative routes. The CCRMA works with the numerous cities in Cameron County and its neighbor to the South, in the Mexican State of Tamaulipas, to coordinate the construction of projects at an accelerated pace. The CCRMA is working very closely with the Texas Department of Transportation (TxDOT) on several on-going projects in Cameron County. The CCRMA has the authority to undertake projects related to highways, rail, air, and seaport as well as having the ability to undertake projects in Mexico. The CCRMA is not subject to the approval of any other entity, and the Board of Directors approves a budget each year.

Key members of the CCRMA staff include:

- Pete Sepulveda, Jr., RMA Executive Director
- Lulu Mayorga, RMA Executive Administrative Assistant

Key members of TxDOT include:

- Pedro "Pete" Alvarez, PE, TxDOT Pharr District, District Engineer
- Robin Ayers, TxDOT Federal Legislative Affairs Liaison

Support is provided to the CCRMA staff by:

- S&B Infrastructure, Ltd.: General Engineering Consultant (GEC)
- Rentfro, Irwin, & Irwin, PLLC.: General Counsel
- Estrada - Hinojosa: Financial Advisor

Participants in the Project and their role in the Project are as follows:

- Cameron County Regional Mobility Authority – Applicant, Project Manager, Funding Partner
- Texas Department of Transportation – Maintenance & Operations, Funding Partner
- City of Brownsville, Texas – Funding Partner
- Brownsville Navigation District – Funding Partner
- Cameron County – Funding Partner
- Rio Grande Valley MPO – Supporting Partner

Along with the supporting partners previously mentioned, the CCRMA's submission of this Application includes Letters of Support, which can be seen in Appendix B, from various parties.

IV Grant Funds, Sources, and Uses of all Project Funding

This grant application under the MDGP is requesting funds for preconstruction and construction phase activities of the East Loop Project which is identified as an eligible project cost for the Mega, IFNRA and Rural grant programs as defined by Section C.4 of the NOFO. Previously incurred costs for the project, include development phase activities, such as planning, feasibility analysis, and preliminary engineering. The project is currently in active development and shall incur additional design phase, environmental preparation and review, and land acquisition costs as the project continues to move forward to construction.

Project Budget

Table 1 below details the project budget with respect to various cost classifications and by funding source, detailing the total percentage of project costs with respect to each source.

Table 1: Detailed Project Budget

Cost Classification	Total Cost	Non-Federal Funds	MDGP Funds	Other Federal Funds
Administrative and Legal Expenses	300,000	300,000	-	-
Relocation expenses and payments	-	-	-	-
Engineering Design Fees	-	-	-	-
Construction Costs	104,300,000	17,441,000	62,580,000	24,279,000
Construction Inspection Fees	1,150,000	280,000	870,000	-
Contingencies	15,645,000	6,258,000	9,387,000	-
Total Project Costs	**121,395,000**	**24,279,000**	**72,837,000**	**24,279,000**
Percentage	100%	20%	60%	20%

Previously Incurred Project Costs

Previously incurred project costs for the East Loop Project start as early as 2014 and include preliminary engineering studies, advanced planning and development, preparation of project schematics, preparation of environmental documents, and an active work authorization for preparation of construction plans, specifications, and estimates. Previously incurred costs totaled approximately $9,100,000.

Project Contingencies

The CCRMA has implemented many project management procedures to help reduce the exposure and need for high levels of funding for contingency reserves. One such procedure was a value engineering session performed in April of 2014. The results of this session helped reduce the overall project cost by over 14% and reduced the overall risk of cost inefficiencies. The CCRMA will also ensure through contract management terms to include the appropriate performance measures to inhibit project delays and mitigate the funding risks associated. The CCRMA has budgeted within this application a contingency reserve of 7% and is able to use additional emergency resources in the event of the need for reserves.

Freight Rail, Port, and Intermodal Infrastructure

The entirety of the proposed East Loop Project shall be constructed within what will be considered public Right of Way. As a result, all Federal and non-Federal funds spent on the project shall be used to provide public benefits. The project shall support the exchange of goods and services to the community, and particularly between the Port of Brownsville and to the Veterans International Bridge, however none of the proposed improvements take place within their boundaries.

V Project Outcome Criteria

Criterion #1: Safety

The current traffic situation along the existing SH 4 / SH 48 commercial corridor has created a significantly higher traffic collision statistic than both the regional and state averages. This is a significant concern to the City of Brownsville, CCRMA, and to TxDOT because there are seven schools located along this corridor.

This traffic statistic has been attributed to a combination of interactions between the amount of heavy-freight traffic along SH 4 and SH 48, the seven school zones along the route, the current level of service along the roadway, and the existing 17 traffic signals. In 2014, the TxDOT average accident rate of a State Highway in an urban environment is 216.41 traffic collisions per 100 million vehicle miles. In 2008, the 3.88-mile segment of SH 48 between FM 511 and SH 4 had an accident rate of 445.3 accidents per one hundred million vehicle miles. For the segment of SH 4 between SH 48 and I-69, a 1.55-mile segment had an accident rate of 382.7 per one hundred million vehicle miles.

The following table illustrates the latest available vehicle collision data which is from January 2011 to December 2021 the existing roadway network utilized by truck traffic between the Port of Brownsville and the Veterans International Bridge at Los Tomates. During this timeframe, 4,375 collisions occurred on the two state highways and four farm-to-market roads in the area. Of the 4,375 collisions, 2,615 have resulted in injuries and 48 resulted in fatalities. These are major transportation corridors for Brownsville that serve a variety of trip types, including school, work, and shopping trips.

Table 2: Crash Data on Roadways along existing truck route (2011 to 2021)

Roadway	Limits	Total Collisions	Fatalities	Injuries[1]
SH48	FM 511 to SH 4	1372	16	869
SH 4	SH 48 to IH-69E/U.S. 77/U.S. 83	2505	26	1462
FM 1419	SH 4 to FM 3068 (West)	209	0	121
FM 1419	SH 4 to FM 3068 (East)	16	0	10
FM 511	SH 48 to FM 3068	254	6	142
FM 3068	FM 511 to FM 1419	19	0	11
Totals		**4375**	**48**	**2615**

The removal of overweight truck traffic from these corridors will improve overall public safety in the area for vehicles and pedestrians. It would also reduce any potential delays experienced by emergency-service providers due to congested conditions.

Criterion #2: State of Good Repair

The East Loop Project is expected to improve the state of good repair of roads within eastern Brownsville. This will be accomplished by diverting heavy commercial vehicles to the proposed East Loop corridor, alleviating the burden on SH 4 and SH 48, and ultimately reducing the long-term maintenance and repair costs of the overburdened streets and highways in the study area. Commercial truck traffic predominantly

[1] Includes possible injuries, and injuries of unknown severity

uses the SH 4 / SH 48 corridor to access the Port of Brownsville and the Veterans International Bridge. The Project creates a concrete pavement structure that will be constructed to handle the significant amount of heavy-freight traffic between the Port of Brownsville and the Veterans International Bridge, which will divert heavy-freight traffic from SH 4 / SH 48 and greatly reduce their maintenance costs.

Criterion #3: Economic Impacts, Freight Movement, and Job Creation

The East Loop Project is expected to improve the economic competitiveness of the City of Brownsville and Cameron County by reducing travel times for passenger as well as commercial vehicles along existing freight-routes in the area. By providing a faster, more reliable route for freight to travel, the amount of traffic on current routes will be reduced, allowing for decreased travel time for those passenger vehicles using the existing route and for the freight shipments on the new proposed route. The new commercial route will encourage the development of businesses along the project corridor to support the commercial traffic, as well as provide additional incentives to develop the area for additional residential development, and retail or commercial development to the new and existing residents of the area. Additionally, the current freight-route between the Port of Brownsville and the Veterans International Bridge is burdened by the existence of 17 traffic signals along SH 48 and seven school zones. The reliability of the proposed corridor will create a reduced and more reliable travel time for both passenger and freight vehicles.

Criterion #4: Climate Change, Resiliency, and the Environment

The project promotes a more environmentally sustainable transportation system within Brownsville and Cameron County. The efficiency that the East Loop Project will create includes: the reduction of fuel consumption by trucks, the reduction of travel delays along the existing route, and the reduction of fuel consumption from regular automotive travel. Greenhouse gas emissions will also likely decrease as a result of the reduction in idle time by both automobiles and commercial trucks along the combined freight network. Additionally, multiple wildlife crossings for small and medium animals are proposed to provide safer connectivity for native wildlife to the various vegetated areas surrounding the project area.

Criterion #5: Equity, Multimodal Opportunities, and Quality of Life

The existing freight traffic along SH 48 and SH 4 reduces the quality of life for residents in the area. The noise and chemical pollution generated by the commercial traffic transporting freight along existing routes acts as a nuisance to residents, local motorists, and schools in the area. The proposed travel corridor will move this heavy freight traffic to a more sparsely populated region of Cameron County, thereby reducing the impact of noise and chemical pollution while creating more predictable and reliable travel times for the region. The following seven schools listed below, which are along the existing freight corridor, will no longer have a significant amount of truck traffic to contend with, thereby increasing the quality of life of the employees, students and parents, not to mention the obvious safety concerns that will be put to rest:

- Egly Elementary
- Victoria Heights Elementary
- J.T. Canales Elementary
- Garcia Middle School
- Perkins Middle School
- Faulk Middle School
- Porter High School

The construction of the East Loop Project will create the main freight corridor between the Port of Brownsville and the Veterans International Bridge, which will bypass heavily populated areas thus creating a safer and more efficient pathway for trade. These commercial trucks will have fewer traffic stops than the 17 that exist along the current corridor nor will these trucks pass through the school zones, resulting in an overall more predictable and reliable travel time.

Criterion #6: Innovation Areas: Technology, Project Delivery, and Financing

The proposed East Loop Project will encourage development along the project alignment in order to support the increased commercial traffic, resulting in supporting infrastructure and businesses being created. This increase in business will encourage companies to expand their network of available services to the project area, allowing previously underserved rural communities greater access to broadband services.

The CCRMA is also working closely with the Brownsville Navigation District (the Port of Brownsville), Texas Department of Transportation and local brokers to further improve the speed and reliability of the Cameron County freight, to accomplish this the proposed East Loop Project will be classified as an Overweight Corridor and will assess a permitted usage fee for overweight commercial vehicles to utilize the roadway, which has and will continue to be used for freight project maintenance and development. The CCRMA is also working with United States Customs and Border Protection to further improve commercial border crossings, by implementing the FAST lane at the Veterans International Bridge and further investigating the use of Smart RFID tags in order to further secure the United States Border and improve the border crossing times, in order to improve the competitiveness of the regional international trade enterprise.

VI Benefit-Cost Analysis

In order to demonstrate the cost effectiveness of the East Loop Project, a benefit cost analysis for the project was conducted comparing a possible future where the project is not constructed, to one where the project is constructed. The BCA analyzed a period of twenty (20) years from 2025 to 2045, based on the projected construction start date, it was assumed that in the future without the project, no significant improvements would be done to increase capacity of the existing infrastructure and no alternative projects would be implemented during this timeframe. Average daily traffic for both commercial and light-duty vehicles would continue to increase by approximately 2.12 percent per year in accordance with the 2015 Brownsville MTP Traffic Model. As per guidance from the Department, all benefits and costs were converted to a net present value to the first year of construction (2025) by applying a real discount rate of 7 percent per year. A full breakdown of the quantified project costs and benefits is included in Appendix A: East Loop Project Benefit Cost Analysis.

Project Costs

Costs for the project including capital improvement costs related to the planning, design, construction, and maintenance of the project. It is important to note that in a future with the project, because the proposed project includes a traffic route that is longer than the existing route from Veterans International Bridge to the Port of Brownsville, that is expected that the costs over the analysis period for emissions and vehicle operations will increase when compared to the future without the project. The calculated project costs for the analysis period including previously incurred costs for planning and development at a 7 percent discount rate is $236.6 million.

Project Benefits

Benefits from the project include maintenance benefits, travel time savings, and safety benefits. With respect to maintenance benefits, the existing travel routes will experience less traffic because of the project due to the diversion of traffic, particularly from heavy duty commercial vehicles, from the existing routes within the study area to the proposed east loop project. Similarly, because traffic is being diverted away from existing routes to a new roadway with additional capacity, the level of service for the existing roadways is expected to increase, resulting in reduced travel times along all routes and a reduction in the traffic collision rate. The calculated project benefits for the analysis period at a 7 percent discount rate is $366.7 million.

Benefit Cost Ratio

The estimated benefit cost ratio for the proposed project is approximately 1.54 as shown on Table 3 on the next page.

Table 3: Project Benefit Cost Ratio

Category	Amount
Project Implementation Cost	$155,949,816
Emissions Cost	$2,903,553
Vehicle Operation Cost	$77,777,850
Total Project Costs	$236,631,219
Maintenance Benefit	$4,744,638
Travel Time Benefit	$175,685,657
Safety Benefit	$186,265,597
Total Project Benefits	$366,695,892
Benefit Cost Ratio	1.5497

VII Project Readiness and Environmental Risk

Technical Feasibility

The East Loop Project is the culmination of planning and development by multiple project partners and stakeholders including Texas Department of Transportation, City of Brownsville, Cameron County, Port of Brownsville and the Cameron County Regional Mobility Authority as a solution to the traffic congestion and safety concerns of the current freight corridor. The studies to date include alternative analysis, draft environmental assessments, schematics, and value engineering studies have provided a comprehensive look that confirms that the proposed design meets the project design criteria in order to solve the identified transportation concerns and to mitigate risk to project schedule and cost overruns. All current, in development and future studies, documentation and plans have been and will be developed to meet State and Federal Standards.

As previously stated, the project Plans, Specifications and Estimates are currently in development and have been completed to thirty percent (30%). The construction cost estimate used for the basis of this request funding under the Multimodal Project Discretionary Grant Opportunity used this construction cost estimate. All of these factors considered, the proposed contingencies allocated to the project account for inflation, additional features as a result of the project's continued development, and construction cost adjustments for construction to start post grant award.

Project Schedule

The proposed scheduled shown in Table 4 below reflects the current project delivery schedule for the East Loop Project, with the major milestones of completing the PS&E package with the required agency approvals by April 2023 and to have the completed Environmental Assessment with a Finding of No Significant Impact (FONSI) by July 2023. Upon receipt of FONSI and environmental clearance, the CCRMA will proceed with right-of-way acquisition in accordance with 49 CFR part 25, and any other legal requirements that may apply. The CCRMA currently has professional staff as well as engineering firms under contract to initiate this work. The CCRMA understands that the deadline to statutory deadlines for INFRA and RURAL is September 30, 2025, and that there is no statutory deadline for the Mega grant, but that the department is seeking to begin construction before September 30, 2025. The CCRMA's schedule is to have all documents in place to let the project for construction in April 2025, and for construction to start in early September 2025 pending the selection of the Awarded Contractor.

Table 4: Project Delivery Schedule

Project Task	Task Start	Task Completion
Plans, Specifications and Estimate	October 2020	April 2023
Agency Coordination and Approval	October 2020	January 2023
Environmental Compliance	October 2019	July 2023
Right-of-Way Acquisition	July 2023	January 2025
Utility Adjustments	October 2023	March 2025
Project Letting	January 2025	August 2025
Project Construction	September 2025	December 2027

Required Approvals

Environmental Permits and Review

An Environmental Assessment (EA) is being prepared for the project in order to meet NEPA requirements and is anticipated to be obtained in advance of project design completion and the recommended construction start deadline identified by the grant programs. The Environmental Assessment document is being prepared with additional field investigations and underway, several public meetings have already been held to help provide initial project scoping as well as preliminary feedback on route studies and pedestrian elements. It is anticipated that the Draft Environmental Assessment shall be completed in March of 2023 and the Public Hearing will be held in April of 2023, resulting in a final document to be completed in May 2023. Upon review completed EA, it is anticipated that the East Loop Project receive a Finding of No Significant Impact in July 2023.

State and Local Approvals / Federal Transportation Affecting State and Local Planning

The propose East Loop Project has been identified on the Regional Border Master Plan, the RGVMPO 2019-2022 Transportation Improvement Plan. It is not anticipated that the requirements related to timing of potential grant funds would impact any of the relevant plans.

Assessment of Project Risks and Mitigation Strategies

The project planning team has considered several possible project risks and addressed them accordingly through either prior public meetings and involvement to address potential feedback from the community, providing adequate time in the project schedule to account for potential delays in the acquisition of project approvals by federal, state, and local agencies, as well as potential delays or cost increases because of real estate acquisition. Other potential risks, such as an uncommitted local match or lack of legislative approvals are not considered a risk to the continued development of the project.

The CCRMA is familiar with the remaining risk factors and have been accounted for in the development of the project schedule. In particularly, the greatest risk identified is the timeline for approval of the environmental due to the size of the project and diversity of the project area. In order to reduce the risk of impact to the project, the CCRMA began work on the Environmental Investigations early, and allotted three years to the preparation, review, and approval of the Environmental document. Similarly, acquisition of land following the approval of the document has been given additional time to account for the possibility of extended negotiations with landowners, as well as the potential for needing to exercise the use of Eminent Domain to ultimately obtain the required Right-of-Way (ROW).

VIII Project Requirements

National or Regional Economic, Mobility or Safety Benefits

As discussed in the benefit cost analysis, the East Loop Project meets the first statutory requirements for the three grant programs due to the economic, mobility and safety benefits that the project will produce on a regional and national level.

At a regional scale, the creation of an overweight corridor outside of the Brownsville urbanized area will improve safety, intra-local mobility, and encourage economic development in the community. Safety shall be improved by reducing the high accident and injury rate of that roadway section and by routing commercial vehicles away from the seven public schools along that route. Regional mobility will be improved by the improved level of service along major roadways resulting in reduced travel times. The construction of the East Loop Project will encourage commercial development along the project alignment to support commercial traffic.

At a national scale, the Veterans International Bridge and the Port of Brownsville are critical components of the national supply chain. Construction of the East Loop Project will improve the mobility and reliability of the port to the National Highway System via I-69E, and between the Veterans International Bridge and the Port of Brownsville. This increased reliability will increase the competitiveness of the United States on an international scale.

Cost Effectiveness

All three funding programs include a statutory requirement that the project will be cost effective. As shown in Section VI of this project narrative, and in the detailed Benefit Cost Analysis, Appendix A, the East Loop Project is a cost-effective solution to the transportation issues effecting the South Texas Border community. The proposed project has a BCR of 1.54 over the twenty-year analysis period recommended by the Department of Transportation.

National Goals (Section 150)

The proposed East Loop Project meets five of the National Goals stated in 23 U.S.C § 150 required by the INFRA and RURAL grant programs. The National Goals that the project meets are the goals of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, and environmental sustainability.

As previously mentioned, the purpose of the project is to reroute commercial traffic on SH 4 and SH 48 between I-69E and the Port of Brownsville away from the Brownsville Urbanized Area by constructing a direct overweight corridor. The existing route has accident and injury rates higher than the regional, state, and national averages, and relocating the commercial vehicles will have a cascading effect where the congestion along the route will be reduced, resulting in improved safety particularly for the seven school zones along the existing route, and reduced maintenance costs for SH 4 and SH 48. The new route will be designed to withstand heavier vehicles and improve travel times, resulting in a more reliable travel route for emergency responders and commercial vehicles traveling to and from the Port of Brownsville. Furthermore, the project has been designed from the beginning with the region's unique ecosystem in mind and will include numerous wildlife crossings to encourage the preservation of natural resources as well as minimizing construction of new roadway on new location, utilizing existing corridors as much as possible.

Preliminary Engineering

In accordance with the IFNRA and RURAL Grant programs, the East Loop project is the culmination of multiple years of preliminary engineering, starting in 2008 the CCRMA began the preliminary engineering and environmental planning for the project in partnership with the City of Brownsville, TxDOT, Cameron County, and the Port of Brownsville. This includes topographic surveys, route planning, preliminary geotechnical investigations for roadway and levee work, hydrologic analysis, regional traffic studies, sound studies, an alternative analysis along with preliminary estimates, development of project schematics and public meetings to discuss project components and route selection, as well as the inclusion of other pedestrian elements such as shared use paths and bicycle lanes in the urban sections. The project has also undergone a Value Engineering Study to further minimize risk in both cost and schedule overruns, and to optimize project components for expedited construction. The project is currently in active development of construction plans completed to the 30% stage based on the results of the planning studies performed. The project is included on multiple state and local plans as shown in Appendix C.

Non-Federal Financial Commitments

It is understood that the INFRA and MEGA Grant Programs require one or more stable and dependable sources of funding/financing be available to construct, maintain and operate the project as well as provide a contingency for unanticipated cost increases. The CCRMA and the project partners have already prepared its future budgets to account for the continued development, construction, and operation/maintenance of the project for the project via general funds, capital improvement plans, and overweight freight development funds. The project budget includes a contingency of 15%, which will be covered by the CCRMA's available funds in the event it is needed, and a letter of commitment is included in Appendix B to provide the department documentation of this commitment.

Federal Financing Need

The INFRA grant program states that the project cannot be easily completed without other Federal funding of financing available to the project sponsor. The MEGA grant program states that the project is in significant need of Federal Funding. Due to the size of the project, and estimated construction costs, the CCRMA believes that the project is in critical need of federal financing. Due to the estimated construction costs, components included in the project scope have already been reduced or deferred from initial construction, such as an overpass intersection, as a result of the Value Engineering Study. The project schedule has been pushed continuously back since the need for a transportation solution was identified in the early 1990s, and the project officially started in 2008. Without additional federal funds, the project may be further delayed from its current projected construction start date, resulting in increases in project costs due to the rising costs of construction.

Project Timing

The INFRA and RURAL grant programs require that the project is reasonably expected to be reasonably expected to begin no later than September 30, 2025, or 18 months after obligation of funds for the project. The MEGA Grant program only requires that the applicant have sufficient legal, financial and technical capacity to carry out the project, however the Department of Transportation is seeking projects under the program that will begin construction before September 30, 2025. As per the current schedule, the East Loop project shall be constructed as a single construction plan, with a construction starting in early September 2025.